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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	**Application No.** 10/618,203	**Applicant(s)** SAINT-HILAIRE ET AL.	
	Examiner DANIEL F. HAJNIK	**Art Unit** 2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 March 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6,8 and 10-34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6,8 and 10-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *11 July 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *3/19/2010*.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 30-34 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter, electro-magnetic signals.

In particular, the claimed computer-readable storage medium may be a signal or carrier wave. The specification states the following from the amendment made 10/6/2008, in [0013]:

> [0013] Embodiments of the invention may be implemented in hardware, firmware, software, or any combination thereof. Embodiments of the invention may also be implemented as instructions stored on a machine-readable medium, which may be read and executed by one or more processors. A machine-readable medium may include any mechanism for storing or transmitting information in a form readable by a machine (e.g., a computing device). For example, a machine-readable medium may include read only memory (ROM); random access memory (RAM); magnetic disk storage media; optical storage media; and flash memory devices~~; electrical, optical, acoustical or other forms of propagated signals (e.g., carrier waves, infrared signals, digital signals, etc.), and others~~.

Since the previous office action was written, the office has made their standards and interpretation for computer-readable mediums more strict (please also refer to the following memo issued by the office: http://www.uspto.gov/patents/law/notices/101_crm_20100127.pdf).

The office has now taken the position that a computer-readable medium described as a computer-readable storage medium is not enough to differentiate it from including signals in most cases. This is in part because the specification as quoted above gives an open definition to exactly what constitutes a computer-readable medium (CRM). While the disclosure does cancel certain examples of signals from the specification as shown above, the definition of the CRM itself is still vague and open for interpretation. For example, the disclosure states the CRM "may include" the following examples. Or the disclosure in [0013], states that "A machine-readable medium may include any mechanism for storing or transmitting information".

One of ordinary skill in the art would reasonable interpret a computer-readable storage medium as it is known in the technology to include signals or propagated waves. The specification states that the CRM may be any method or technology for storing signals. This may possibly mean that a signal that travels through the air from one computer to another (i.e. a wireless transmission) technically "stores" information being sent from one machine to another. Since, the transmission "stores" data, this would show one of ordinary skill in the art that this transmission may possibly be a "computer-readable storage media".

Claims that recite nothing but the physical characteristics of a form of energy, such as a frequency, voltage, or the strength of a magnetic field, define energy or magnetism, per se, and as such are nonstatutory natural phenomena. Moreover, it does not appear that a claim reciting a signal encoded with functional descriptive material falls within any of the categories of patentable subject matter set forth in § 101. One useful and possibly helpful description of the claimed computer-readable medium is to indicate in the claim that it is a "non-transitory" type of computer readable medium.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 2, 5, 8, 12, 13, 15-20, 22-26, 28-31, 33, and 34 and are rejected under 35 U.S.C. 103(a) as being unpatentable over Lok et al. (US Pub 2003/0182469) in view of Suzuki et al. (US Patent 6,331,851) in further view of Mallart (US Patent 6,557,041).

As per claim 1, Lok teaches the claimed:

1. A method comprising:

receiving, via a network, a motion command ... at a first device from a second device *([0027], "The component in the user interface toolkit may be configured to render a graphical item and the remote-capable component may be configured <u>to generate a command to render a graphical item</u>" (emphasis added in this passage and others) where the motion is the changing or movement within different user interface elements, i.e. selection of different items in the dropdown menu 216 in figure 6a. Also see figure 3 from the reference, which is shown below or on the following page:*

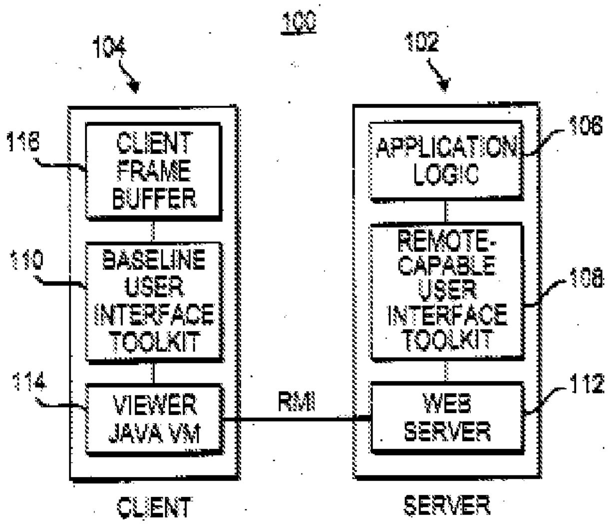


FIG. 3

In this instance, the first device is the client in figure 3 and the second device is the server in figure 3);

wherein the motion command -- without including pixel values generated by the second device *([0039], "the baseline interface toolkit 110, but which issue remote messages rather than execute graphical functions ... transmits the commands across the network to the client 104 ... A client viewer ... translates the messages issued ... which are rendered on the client frame buffer 1"; in this case, since the graphics are rendered on the client or first device, the commands do not include pixel values generated on the server or second device)* directs animation of an image object *([0041], "In rendering the graphical component, the toolkit may include commands to display a plurality of shapes, colors, and text. The toolkit is configured to interact with the application according to an application programming interface. For example, the toolkit receives an invocation, or call, from the application to draw graphical components at certain*

<u>times</u> *during the operation of the application" where drawing graphical components at certain times creates animation effects);*

Presenting the animation of the image object on a display of the first device via the GUI *([0041], "a toolkit has the ability* <u>*to draw*</u> *a frequently-used, graphical components* <u>*on a user display*</u> *as commanded by an application running on the computer"; where a GUI is shown in figure 5).*

Lok does not teach the remaining claim limitations.

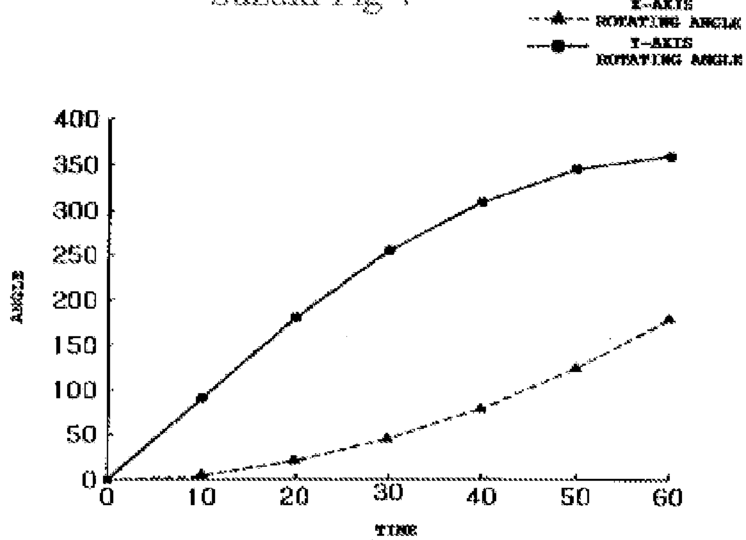
Suzuki teaches the claimed:

An index, a plurality of display coordinates and a time period *(see figures 3 and 4 from the reference, these figures are shown below or on the following page:*

Suzuki Fig 3

TIME	X-AXIS ROTATING ANGLE	Y-AXIS ROTATING ANGLE
0	0	0
10	5	90
20	20	180
30	45	180
40	80	255
50	125	345
60	180	360

Suzuki Fig 4



in figures 3 and 4 where time periods and display coordinates are shown; and index is shown in figure 9 under the "ID" field of the data structure;

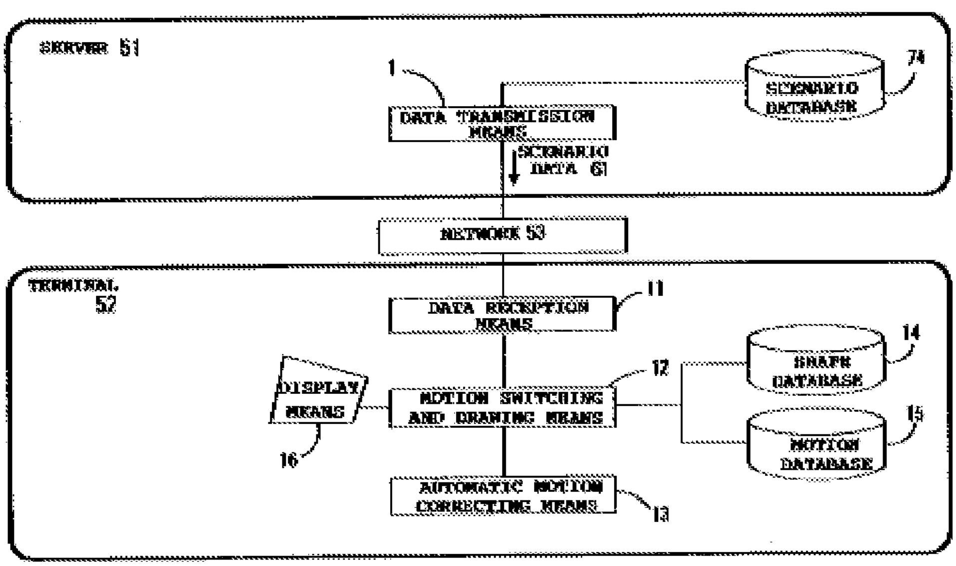
Suzuki Fig 9

CURRENT MOTION		SUBSEQUENT MOTION		KEY FRAME	
ID	FRAME TIME	ID	FRAME TIME	X-AXIS ROTATING ANGLE	Y-AXIS ROTATING ANGLE
Ma	60	Mb	0	160	340

index information is also shown in figures 12a-c where each image is referred to by an index, i.e. HP1 or HP2).

wherein the motion command, received separately from an image object stored in an image cache to be reference by the index *(see figure 1 from the reference which is shown below or on the following page:*

Suzuki Fig 1



in figure 1 where the terminal 52 or first device receives motion command data from the server 51 or second device via "Data Reception Means 11"; these motion commands received are stored in the motion database 15 on the client 52 or first device; also see col 8, lines 60-65,

"A data transmission means 1 transmits via the network 53 those 61 of a plurality of scenario data stored in the scenario database 74 which are to be displayed at the terminal 52 ... The scenario data 61 specifies a three-dimensional character to display and <u>defines a combination order of motions</u> required to move the three-dimensional character"; in this case, the motion command is received separately from the image object data stored in the cache because the reference teaches of a way to reference and received image object data from the local terminal or client cache rather than receiving it from the server; thus the motion command data and image object data are received separately; i.e. see col 4, lines 11-17, "This configuration <u>requests the server for only character data that is not present in the character database of the terminal</u> in order to obtain required character data before generating character animations at the terminal"; thus in cases where all the character data is already present in the character database on the terminal, the image object data does not need to be received from the server; thus, the image object data is received separately from the motion command data; note in this case, the character database on the terminal or first device is the claimed image cache);

directs animation of the image object at the plurality of display coordinates over the received time period *(in figures 4 and figures 12a-c where the animation of the image object is presented using the display coordinates over time).*

updating a frame buffer of the first device with the image object of the image cache over the time period to animate the image object per the motion command *(in figure 19, steps 105-107; also see col 18, lines 8-10, "An image display means 107 displays animations by sequentially*

displaying and <u>*updating frame data stored in the frame buffer 105*</u>*" where this frame buffer is animated over time according to the image cache or animation database and its associated motion commands)*;

It would have been obvious to one of ordinary skill in the art at the time of invention to combine Lok with Suzuki in order to expand the range of graphical capabilities in the user interface and make the output more interesting by use of planned animation. Lok is modified by Suzuki by incorporating the motion commands of Suzuki into the transmitting step of Lok in order to manipulate animation object data stored on a local cache on the client, terminal or first device. Thus, in the combination, Lok transmits the motions command data structure as organized and explained in Suzuki where these commands include indices, coordinates, and time values.

Lok can further be modified by Suzuki by incorporating the indices, coordinate values, and time values received from the server or second device of Suzuki and putting it into the interface toolkit of Lok. Through this combination, the animating elements and their associated tags in Suzuki can be built into the graphical user interfaces used by Lok on the client system as shown in figure 7.

Mallart teaches the claimed:

Receiving, via network, ... a control flag ... directs animation of the image object at the plurality of display coordinates over the received time period at a transition rate indicated by the control flag *(in figure 3 where the control flag is sent over the network; figure 3 from the reference is shown below or on the following page:*

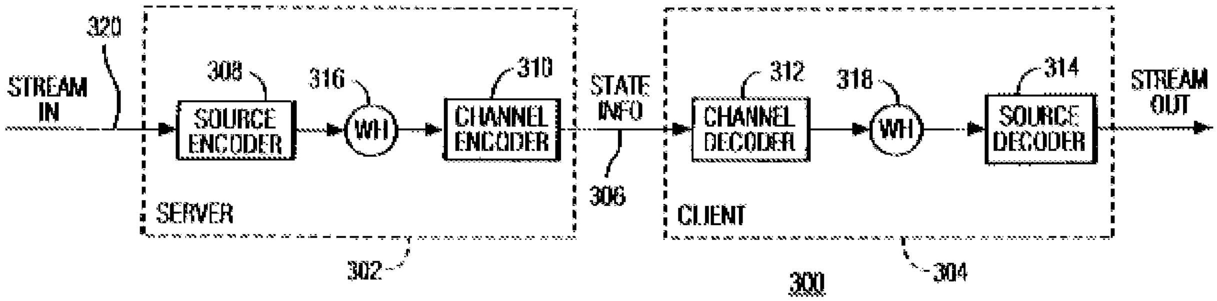


FIG. 3

In this case, control flag data is sent from server 302 to client 304; also see col 9: a portion of this column, from the reference, is shown below or on the following page:

FIG. 7 is a diagram of a further system **700** in the invention. FIG. **7** shows the lay-out of a real race track **702**, here the famous circuit of Assen, the Netherlands, where the Dutch TT is held annually. The length of the TT circuit is 6.05 km (3.76 miles). Now assume that in the real race each of the real life racers, here dots **704**, **706**, **708**, . . . , **718** on track **702**, each have a transmitter onboard that sends to a receiving station **720** their current positions and velocities (speed and direction), and preferably parameters as the roll (banking angle) and pitch ("wheelie") and yaw (power slide when accelerating hard out of a bend) of the motorcycle. Station **704** sends the data received from the racers as state changes to client machines **722**, **724**, . . . , **726** of the end users over a network **728**, e.g., the Internet. Clients **722–726** have received in advance a copy of a 3D graphics world model (see above) of track **702**, e.g., downloaded in advance via the Internet or on a diskette. In this model, the positions and velocities of the objects representing the real life racers on track **702** are determined by the state changes received at the user's machine **722**, **724** or **726**. The objects representing

In Mallart, in col 9, lines 28-33, control flag is sent to control the transition animation of objects 704, 706, 708, ... 718; the reference states that this data or flag data relating to animation transitions is sent:, i.e. col 9, lines 28-33 "current positions and velocities (speed and direction)" and "yaw (power slide when accelerating hard out of a bend)". These phrases make reference

to a control flag that determines the transition rate of the animation, i.e. through speed and acceleration; col 9, lines 33-40 states that this data is sent over the network and used to display animation on the client according to the transition rate; in this case, the examiner is interpreting the phrase "control flag" to mean a piece of data or a signal transferred over a network that indicates how the animation motions should perform or change and then use that signal or flag to control how the animation is displayed).

It would have been obvious to one of ordinary skill in the art at the time of invention to combine Mallart with Lok and Suzuki in order to use animation for a wider array of applications such as applications where race track data or other animation data in motion which involves speed changes or acceleration motion.

Lok and Suzuki are modified by Mallart by incorporating the control flag of Mallart into the transmitting step of Lok and motions of Suzuki. For example, the server functions of Mallart in figure 3 may be incorporated into the server of Lok and the client functions of Mallart in figure 3 may be incorporated into the client of Lok. See the following diagram below or on the following page:

Fig 3 of Mallart

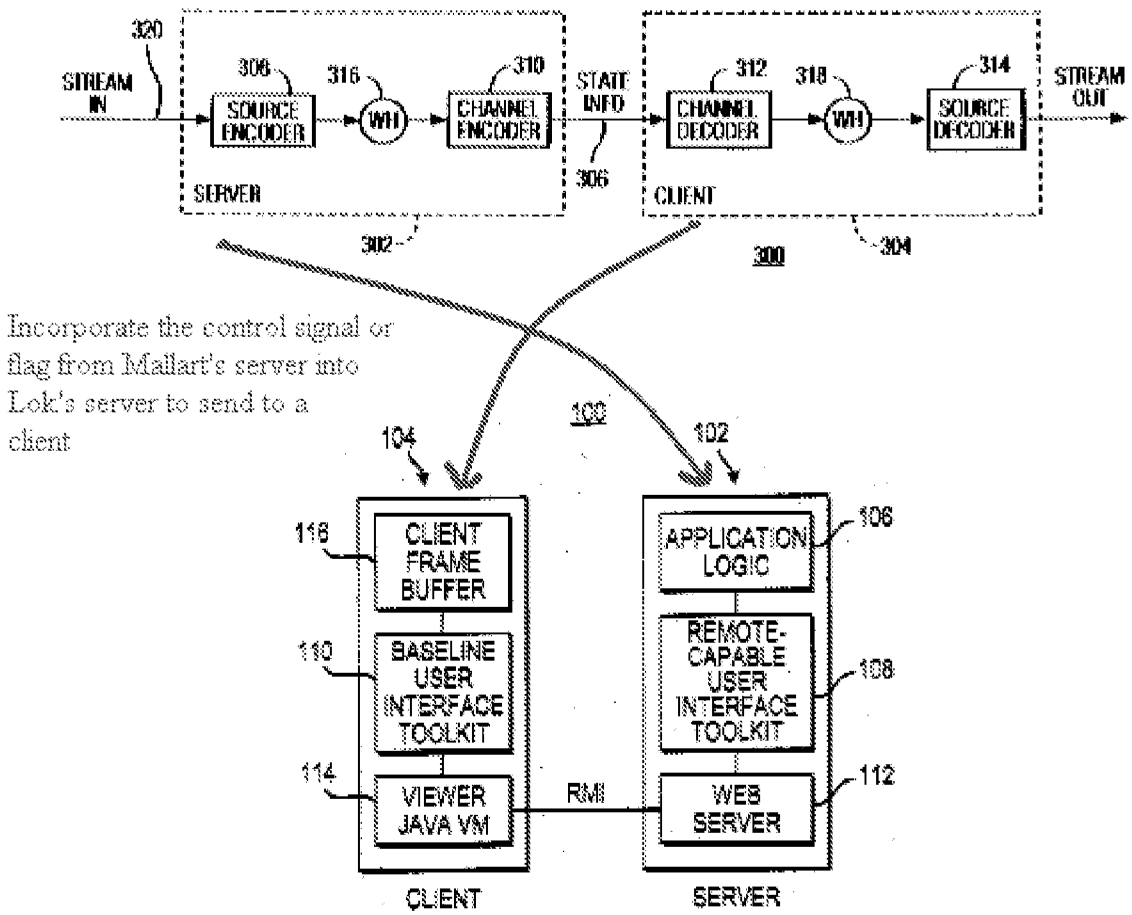


FIG. 3

Fig 3 of Lok

The control flag of Mallart may provide finer and more detailed control over animation motions across a network. Further, the control flag as mention in col 9, lines 28-33 of Mallart may be used to control the animations present in Suzuki such as in figures 3 and 4 of Suzuki to add motion control such as speed or acceleration adjustments.

As per claim 2, Lok teaches the claimed:

2. The method of claim 1 further comprising generating a video output signal representative of the frame buffer and the motion of the image object *([0041], "a toolkit has the ability to draw a frequently-used, graphical components on a user display as commanded by an application running on the computer" where the displaying requires an output signal)*.

As per claim 5, Lok teaches the claimed:

5. The method of claim 1 further comprising

receiving the image object from the second device *([0046], "receiving commands to draw graphical items")*, and

storing the image object in the image cache *([0039], "remote-baseline interface toolkit 110, which are rendered on the client frame buffer 116" where image object is stored as a rendered object)*.

As per claim 8, Lok does not teach the remaining claim limitations.

Suzuki teaches the claimed:

Updating the frame buffer to animation the image object moving along a curve defined by the plurality of coordinates over the time period *(in figure 4 where the image moving along a curve over time is shown and col 18, lines 8-10, "An image display means 107 displays animations by sequentially displaying and updating frame data stored in the frame buffer 105" where this frame buffer is animated over time)*.

It would have been obvious to one of ordinary skill in the art at the time of invention to use the curve animation motion of Suzuki with Lok. The motivation of claim 1 is incorporated herein.

As per claim 12, Lok teaches the claimed:

updating the frame buffer with the image object comprises updating the frame buffer *([0041], "In rendering the graphical component, the toolkit may include commands to display a plurality of shapes, colors, and text ... the toolkit receives an invocation, or call, from the application <u>to draw graphical components at certain times</u> during the operation of the application" where drawing graphics at certain times is updating).*

Lok does not explicitly teach the remaining claim limitation.

Suzuki teaches the claimed:

the motion command indicates a first rotation, a second rotation and

the image is rotated from the first rotation to the second rotation over the time period *(in figure 4 where object data is rotated from a first rotation or starting rotation to an ending rotation position or second rotation; the figure shows this rotating occurs over a time period).*

It would have been obvious to one of ordinary skill in the art at the time of invention to use the first and second rotations as taught by Suzuki with the teachings of Lok. The motivation of claim 1 is incorporated herein.

As per claim 13, the reasons and rationale for the rejection of claim 12 is incorporated herein.

As per claim 15, Lok does not teach the claimed limitations.

Suzuki teaches the claimed:

15. The method of claim 1 further comprising receiving a cache management command from the second device, and updating the image cache per the cache management command *(col 4, lines 11-17, "This configuration <u>requests the server for only character data that is not present in the character database of the terminal</u> in order to obtain required character data before generating character animations at the terminal"; in this situation, a cache management command is received from the server or second device; also note in this case, the character database on the terminal or first device is the claimed image cache; this information received from the server or second device deals with cache management because the information is helpful for managing the information stored in the character database of the terminal; further, this information is updated over time according to image data received and stored from the server into the character database on the client or terminal).*

It would have been obvious to one of ordinary skill in the art at the time of invention to utilize the cache management as taught by Suzuki with the teachings of Lok in order to provide a better and more efficient cache by actively managing it through management commands.

As per claim 16, Lok does not teach the claimed limitations.

Suzuki teaches the claimed:

16. The method of claim 1 further comprising providing the second device with an indication that the device has completed the motion command *(in figures 28a-b where the completion of one motion command, i.e. motion data M1 is indicated to the server so that another motion*

command may be executed, i.e. M2; this information is communicated to server 51 in figure 1 from terminal 52 through network 53; these motions are controlled by motion commands from the server).

It would have been obvious to one of ordinary skill in the art at the time of invention to utilize an indication message as taught by Suzuki with the teachings of Lok in order to provide better feedback to the another remote device and better communication.

As per claim 17, the reasons and rationale for the rejection of claim 1is incorporated herein. In addition, Lok teaches the claimed additional features:

17. An apparatus *(in figure 3, piece 102, "server")* comprising

at least one processor to execute instructions *([0054], "The application logic 106 is executed entirely in the server 102" where executing requires a processor)*,

a network interface controller to transmit commands to a remote device *(in the abstract, "A network communication protocol of sending messages between the remote-capable user interface toolkit on the server and the user interface toolkit on the client" where a network interface controller is required to make the network communication protocol work properly)*,

a memory comprising a plurality of instructions that in response to being executed by the at least one processor *([0054], "The application logic 106 is executed entirely in the server 102" where the application logic has instructions associated with the logic)*, result in the at least one processor,

loading the remote device with image objects *([0027], "Similarly, the server may be configured to communicate the message to the user interface toolkit on the remote client to*

render a graphical item" where graphical items can have image objects associated with them), and

As per claim 18, Lok teaches the claimed:

18. The apparatus of claim 17 wherein the plurality of instructions further result in the at least one processor generating the one or more motion commands based upon one or more events generated by an application of the apparatus *([0044], "When the user clicks the button, the toolkit generates an event. In this case, the result may be that a toolkit text window is automatically closed when the event listener detects an event triggered by the button component" where closing the toolkit text window is a command).*

As per claim 19, Lok teaches the claimed:

19. The apparatus of claim 17 wherein the plurality of instructions further result in the at least one processor generating the one or more motion commands based upon one or more events received from the remote device via the network interface controller *([0046], "These events are then conveyed to the application according to the application programming interface, which enables the application to take some action based on the events generated by the user" where events is communicated across the network between client 104 and server 102 in figure 3).*

As per claim 20, Lok does not teach the claimed limitations.

Suzuki teaches the claimed:

the motion command indicates first location, second location, and the time period *(in figures 12a-c where a motion command indicates motion of the character, i.e. moving from a first location to a second location; the figure shows that this motion occurs as an animation over time; in figure 4 further shows motion occurring over time for a given motion command)*.

updating the frame buffer with the image object comprises updating the frame buffer to animate the image object moving from the first location to the second location over the time *(col 18, lines 8-10, "An image display means 107 displays animations by sequentially displaying and updating frame data stored in the frame buffer 105" where this frame buffer is animated over time according to the image cache or animation database and its associated motion commands)*.

It would have been obvious to one of ordinary skill in the art at the time of invention to use the motion commands and updating as taught by Suzuki with the teachings of Lok in order to better execute and plan the motion command data structures through the use of explicit coordinate locations and time periods.

As per claims 22 and 23, these claims are similar in scope to claims 12 and 8, respectively, and thus are rejected under the same rationale.

As per claim 24, the reasons and rationale for the rejection of claims 1 and 17 are incorporated herein.

As per claims 25 and 26, these claims are similar in scope to claims 2 and 20, respectively, and thus are rejected under the same rationale.

As per claims 28 and 29, these claims are similar in scope to claims 12 and 8, respectively, and thus are rejected under the same rationale.

As per claim 30, the reasons and rationale for the rejection of claims 1 and 17 are incorporated herein. Lok teaches the claimed:

30. A computer-readable storage medium having a plurality of instructions stored therein which, when executed by a processor of a computer, cause the processor to perform a process for displaying a GUI on a remote device; and determining to update a graphical user interface in response to one or more events *(where a GUI is shown in figure 5; [0053], "the application logic 106 which resides on the server 102 interacts with the remote client 104 by making calls on the RJFC components on the server 102 alone" where application logic to reside on the server requires a storage medium and [0054], "The application logic 106 is configured by the programmer to interact with the user interface toolkit according to an application programming interface" where the user interface is a graphical user interface)*,

As per claims 31, 33, and 34, these claims are similar in scope to claims 20, 12, and 8, respectively, and thus are rejected under the same rationale.

2. Claims 3, 4, 6, 10, 11, 21, 27, and 32 and are rejected under 35 U.S.C. 103(a) as being unpatentable over Lok et al. (US Pub 2003/0182469) in view of Suzuki et al. (US Patent

6,331,851) in further view of Mallart (US Patent 6,557,041) in further view of Merrill et al. (US Patent 6,329,821).

As per claim 3, Lok does not teach the claimed limitations.

Merrill teaches the claimed:

3. The method of claim 1 further comprising

receiving a background image from the second device *(col 5, lines 42-46, "During playback of the animation, the server relies on graphic support software in the underlying operating system 120 to create windows, post messages for windows, and paint windows and col 4, lines 66-67, "the color of <u>corresponding pixels in the background bitmap</u>". Thus, for animation playback the background image data is transferred from the server to the client and displayed on the client),*

storing the background image to a background buffer *(col 9, lines 30-32, "The loader constructs a composite bitmap by performing bit block transfers from the <u>decompressed bitmaps to an off-screen buffer</u>" where part of the off-screen buffer is a background buffer where background pixels are stored. This is because the animation is drawn overtop the background, thus in order to form a composite bitmap, some background data is used and maybe loaded from an offscreen buffer)*, and

updating the frame buffer with the background image prior to updating the frame buffer with the image object *(col 11, lines 27-29, "Finally, the operating system performs a bit block transfer of this portion to the frame buffer to display the current frame of animation").*

It would have been obvious to one of ordinary skill in the art at the time of invention to generate the background images as taught by Merrill with the teachings of Lok in order to enhance the graphical user interface with more interesting features and design through the use of background images on the screen.

As per claim 4, the reasons and rationale for the rejection of claim 3 is incorporated herein. Lok does not teach the remaining claim limitations.

Merrill teaches the claimed:

decompressing the background image *(col 4, lines 66-67, "the color of the corresponding pixels in the background bitmap" and col 13, lines 23-24, "If the image bits are in a compressed format they are decompressed")* and

storing in a decompressed form *(col 13, lines 31-33, "The animation is played by first rendering the uncompressed frame image data for the next frame to an offscreen video memory buffer").*

It would have been obvious to one of ordinary skill in the art at the time of invention to use the background decompression techniques as taught by Merrill with the teachings of Lok. The motivation of claim 3 is incorporated herein.

As per claim 6, Lok does not teach the claimed limitations.

Suzuki teaches the claimed:

receiving the image object from the second device *(in figure 1 where image data is received from second device or server 51 into the first device or terminal 52)* and

Merrill teaches the claimed:

decompressing the image object, and storing the image object in the image cache in a decompressed form *(col 4, lines 66-67, "the color of the corresponding pixels in the* <u>*background bitmap*</u>*" and col 13, lines 23-24, "If the image bits are in a compressed format* <u>*they are decompressed*</u>*" and col 13, lines 31-33, "The animation is played by first rendering the uncompressed frame image data for the next frame to an offscreen video memory buffer").*

It would have been obvious to one of ordinary skill in the art at the time of invention to use the image decompression techniques as taught by Merrill with the teachings of Lok. The motivation of claim 3 is incorporated herein.

As per claim 10, Lok does not teach the claimed limitations.

Merrill teaches the claimed:

10. The method of claim 1 wherein

the motion command indicates a first scale and a second scale, *(col 4, lines 31-32, "The animated character 60 can move anywhere in the user interface", col 15, line 31, "*<u>*to scale an animation*</u>*", 15, lines 33-34, "when the scale of an animation changes" where it is required for a changing animation during scaling to have a beginning scale (first scale) and ending scale (second scale), and col 14, lines 4-6, "After the frame image is rendered to the display device, an operating system timer is set to go off in the amount of time specified by the frame's duration"),*

updating the frame buffer with the image object comprises updating the frame buffer to animate the image object transitioning from the first scale to the second scale over the time

period *(col 11, lines 27-29, "Finally, the operating system performs a bit block transfer of this portion to the frame buffer to display the current frame of animation")*.

It would have been obvious to one of ordinary skill in the art at the time of invention to generate the image scaling as taught by Merrill with the teachings of Lok in order to provide a wider array and more flexibility to the image manipulation techniques available to the user for making interesting user interfaces.

As per claim 11, the reasons and rationale for the rejection of claim 10 is incorporated herein.

As per claim 21, the reasons and rationale for the rejection of claim 10 is incorporated herein.

As per claim 27, the reasons and rationale for the rejection of claim 10 is incorporated herein.

As per claim 32, the reasons and rationale for the rejection of claim 10 is incorporated herein.

4. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lok in view of Suzuki in further view of Mallart (US Patent 6,557,041) in further view of Richardson (NPL Document, "The RFB Protocol").

As per claim 14, Lok does not explicitly teach the remaining claim limitations.

Richardson teaches the claimed:

14. The method of claim 1 further comprising receiving a capabilities command from the second device, and providing the second device with capabilities of the device *(page 7, section 5.1.1, first paragraph, "Handshaking beings by the server sending the client a ProtocolVersion message. This lets the client know* <u>*which is the latest RFB protocol version number supported*</u> *by the server" where this version number is part of the capabilities of the client).*

It would have been obvious to one of ordinary skill in the art at the time of invention to combine Lok, Suzuki, Mallart, and Richardson. Lok and Suzuki can be modified by Richardson by incorporating the capabilities checking technique of Richardson into the network communicate protocol used by Lok in [0057]. One advantage of the combination is to increase the reliability of the system by ensuring adequate capabilities during interaction.

Response to Arguments

1. Applicant's arguments filed 3/17/2010 have been fully considered but they are not persuasive.

Applicant argues the following (see the following page):

> The Lok reference disclose some form of control executed by a server over subject matter displayed at a remote client. However, the precise collection of specific information that is passed from client to the server over a network does not appear to be thoroughly described. The most descriptive paragraphs that the Applicant could find appear to be paragraphs [0050], [0057], [0058] and [0060]. Paragraph [0050] only states that the server sends a remote process invocation to the client for "drawing the graphics or generating events on the remote client". Paragraphs [0057] – [0058] merely state the existence of communication from the server to the client. Paragraphs [0060] indicates that the server may pass a command to the client to create a "JButton". It is quite clear to the Applicant that, when viewed in a light most favorable to the Examiner's position (and without the Applicant admitting to as much), at most, Lok only discloses a motion command and/or index. As such, Lok fails far short of disclosing the specific collection of information that is passed over a network as recited in the Applicant's claims.

(top half of page 11 in filed response).

The examiner maintains that the prior art rejections in this matter are proper because the Lok reference teaches some of the aspect of the claimed precise collection of specific information to be sent over the network. As explained in the rejections above, Lok teaches the features of receiving a motion command wherein the motion command does not include pixel values generated by the second device (i.e. the server). While other aspects of the precise collection of specific information such as the claimed index, display coordinates, and time period are not explicitly taught by Lok, the secondary reference of Suzuki is relied upon for showing these features. The combination overall relies upon a combination of references taken together

for showing all the aspects of the collection of specific information to be sent over the network. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); In re Merck & Co., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The examiner respectfully is relying upon the combination of art under 35 USC 103(a), obvious-based rationale for the rejection of the claimed features in the data collection.

The examiner further believes that the client to server communication as provided in Lok is important for showing the claimed motion command because it establishes the known means and technology to transmit such data across a network of computers as is known in the prior art.

Applicant remarks:

The Suzuki reference discloses the passing of "scenario data" from the server to the client where the scenario data "specifies a three-dimensional character to display and defines a combination order of motions required to move the three-dimensional character [(specifically, the scenario data includes a list of motion IDs that specify motions)]". See, Suzuki, Fig. 1 and Col. 8, lines 60-67. The Applicant respectfully submits that, again when viewed in a light most favorable to the Examiner's position (and without the Applicant admitting to as much), Suzuki's scenario data at most suggests the existence of the Applicant's claimed index and motion command. Thus, like Lok, Suzuki simply falls short of disclosing the specific collection of information that is passed over a network.

(bottom of page 11 and top of page 12 in filed response).

The examiner maintains that the prior art rejections in this case are in good standing because when the index, coordinates, and time period of Suzuki are taken together with the motion commands of Lok and Mallart the claimed features as taught. While each reference taken alone does not have all the features of the specific collection of information that is passed over the network, the examiner respectfully maintains that it would have been obvious to one of ordinary skill in the art to combine the references to arrive at the claimed specific data structure as sent over the network. Both Lok and Suzuki are primarily concerned with server to client communications and both provide the infrastructure to accomplish this communication. Each system is provided graphics data or animation data to be delivered to a client system for display. One of ordinary skill in the art may combine the systems by incorporating some of the elements in the data structures for communicating in Suzuki are bringing those into the data structures for communication in Lok across their network. The rejection above also explains that these system may be combined together by one of ordinary skill in the art.

Applicant argues:

> Mallart discloses that "[a]nimation is considered a sequence of states...[and]...state information is sent to the clients instead of the graphics data itself." When pressed for more details, however, the Mallart reference seems to described little more than clients are told to move certain objects. Like Suzuki, this disclosure at most (and without the Applicant admitting to as much), might suggest the Applicant's claimed index and motion command. Thus, again, the cited reference falls short of disclosing the complete combination of information that is passed over a network.

(top half of page 12 in filed response).

The examiner maintains that the prior art rejections in this matter are proper because Mallart is providing information to the clients as they relate to "streaming" data to the client systems over a network (see the abstract of Mallart). Streaming as known in the art is technology concerned with providing content over a network from the server system to a client. The examiner respectfully maintains that the control flag in Mallart is used to determined transition rate by using the transmission rate of data coming from the race vehicles based upon their velocities, speed, and acceleration. In turn, this control flag data (data about the transition rate of animation) is sent from the server system to each client as well during communication within the networked system. Since this system too has a similar architecture to that as described in Lok and Suzuki, the examiner believes that one of ordinary skill in the art would have the know how to incorporate the control flag into the data structures used in Lok and Suzuki in order to accomplish the specific collection of data as claimed in independent claim 1 of the invention.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL F. HAJNIK whose telephone number is (571)272-7642. The examiner can normally be reached on Mon-Fri (8:30A-5:00P).

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Ulka Chauhan can be reached on (571) 272-7782. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Daniel F Hajnik/
Examiner, Art Unit 2628